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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,359	10/31/2005	Leong Loke Ng	ISA-035.01	1567
63767 FOLEY HOAG	7590 05/25/200° 7 J.L.P	EXAMINER		
PATENT GRO	UP, (w/ISA)	STOKLOSA, JOSEPH A		
155 SEAPORT BOSTON, MA			ART UNIT	PAPER NUMBER
,,,			3762	
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			MAIL DATE	DELIVERY MODE
			05/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/532,359	NG, LEONG LOKE			
		Examiner	Art Unit			
		Joseph Stoklosa	3762			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SH WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in the may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>04 May 2007</u> .					
,	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)[]	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
<ul> <li>4)  Claim(s) 1-5,8,9 and 21-23 is/are pending in the application.</li> <li>4a) Of the above claim(s) 6,7 and 10-20 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-5,8,9 and 21-23 is/are rejected.</li> </ul>						
7)	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and/o	r election requirement.				
Applicat	ion Papers					
9)	The specification is objected to by the Examine	r.				
10)🛛	The drawing(s) filed on is/are: a)⊠ acce					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (	under 35 U.S.C. § 119		•			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachmer	nt(s)					
	ce of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail D				
3) 🔯 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal F				

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### **DETAILED ACTION**

### Election/Restrictions

1. Claims 6-7 and 10-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/4/2007.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 3. Claims 1-5, 21-23 rejected under 35 U.S.C. 102(b) as being anticipated by Selker et al. (US 6,067,466).
- 4. Selker discloses a method for diagnosing cardiac medical conditions through measurement and analysis of levels of a biomarker such as creatine kinase, CK, (Col. 2, line 11), conducting an EKG measurement on patients (Col. 2, line 7), and assigning weighting factors for the biomarker and ECG results (shown by the coefficients in Fig. 4).
- 5. With regard to claim 2, Selker obtains and analyzes EKG waveforms indicative of cofactors such as ischemia and myocardial infarctions through waveform analysis, such

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as noting ST segment depression or shifting etc. (Fig. 3). As a result examiner interprets Selker to sufficiently meet the limitations of claim 2.

- 6. With regard to claim 3, Selker discloses the use of logistic regression techniques for the assigning weighting factors of the ECG, biomarker, and cofactor measurements, as well as a general population sample with no previous diagnosis of LVSD (Col. 5, lines 10-62; Fig. 4).
- 7. With regard to claim 5, Selker discloses the detecting the presence of myocardial infarctions through EKG analysis (Col. 5, line 2-4).
- 8. With regard to claims 21-23, Selker discloses the diagnostic method to be performed through he use of a computer program that run off of a machine readable medium storage (Col. 3, line 54-57).

### Claim Rejections - 35 USC § 102/103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 8-9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Selker et al. as applied above.
- 11. Selker disclose's determining ischemia through analysis of an ST segment shift (Col. 3, line 26-53; Col. 8, line 16-17), which is equivalent to the ratio of the QRS/QT

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interval. In the alternative it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Selker with analyzing the ratio of the QRS interval/QT interval since it was known in the art that analyzing the ratio of the QRS interval/QT interval is used to provide cardiac data indicative of ST segment shifts which are indicative of heart failure.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Stoklosa whose telephone number is 571-272-1213. The examiner can normally be reached on Monday-Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph Stoklosa

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Examiner Art Unit 3762

JS 5/16/20077

GEORGÉ R EVANISKO PRIMARY EXAMINER